

**DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service**

50 CFR Part 17

**Endangered and Threatened Wildlife
and Plants; Proposal To Determine
Lepidomeda Vittata (Little Colorado
Spinedace) To Be a Threatened
Species With Critical Habitat**

AGENCY: Fish and Wildlife Service,
Interior.

ACTION: Proposed rule.

SUMMARY: The U.S. Fish and Wildlife Service proposes to list *Lepidomeda vittata* (Little Colorado spinedace), a native fish of Arizona, as a threatened species and to determine its critical habitat under the authority contained in the Endangered Species Act (Act) of 1978, as amended. A special rule is proposed which would allow take for certain purposes in accordance with Arizona State laws and regulations. The Little Colorado spinedace was historically known to occur throughout the upper portions of the Little Colorado River drainage, but is now found only in portions of East Clear, Chevelon, Silver, and Nutrioso Creeks and the Little Colorado River in Coconino, Navajo, and Apache Counties, Arizona. The decline of this species has been caused by habitat alteration and loss due to impoundment, removal of water from the streams, channelization, grazing, road building, urban growth, and other human activities. The decline was also caused by the introduction and spread of exotic predatory and competitive fish species, and the use of ichthyotoxins in many of its native streams. These same factors continue to threaten the survival of the spinedace, and there are several water development projects which have been or are being proposed for the remaining habitat of the species. Remaining Little Colorado spinedace habitat is found on U.S. Forest Service, Bureau of Land Management, State of Arizona, and privately owned lands. This proposal, if finalized, would implement Federal protection for *Lepidomeda vittata* as provided by the Endangered Species Act of 1973, as amended. The Service seeks data and comments from the public, State, and Federal agencies on this proposal.

DATES: Comments from all interested parties must be received by July 22, 1985. Public hearing requests must be received by July 8, 1985.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Regional Director, U.S. Fish and Wildlife Service, P.O. Box 1306, 421 Gold Avenue SW., Room 407, Albuquerque, New Mexico 87103. Comments and

materials received will be available for public inspection during normal business hours, by appointment, at the Service's Office of Endangered Species at the above address.

FOR FURTHER INFORMATION CONTACT: Dr. James E. Johnson, Chief, Office of Endangered Species, U.S. Fish and Wildlife Service, Region 2 (see **ADDRESSES** above) 505/766-3972.

SUPPLEMENTARY INFORMATION:

Background

The Little Colorado spinedace, *Lepidomeda vittata*, was first collected by members of the U.S. Topographical and Geographical Survey west of the 100th meridian (Wheeler, 1889). The species was described by E.D. Cope in 1874 from that collection. Cope listed the type locality as the "Chiquito Colorado," which was later defined as "The Little Colorado River somewhere between the mouth of the Uni River and Sierra Blanca (White Mountain)" (Miller and Hubbs, 1960). This fish is a member of the family Cyprinidae and is generally less than 10 centimeters (4 inches) in total length. The species is endemic to the upper portions of the Little Colorado River and to its north flowing, permanent tributaries on the Mogollon Rim and the northern slopes of the White Mountains, in eastern Arizona. This naturally restricted historic range has been significantly reduced in the past 50 years by habitat destruction, use of fish toxicants, and the introduction of exotic predatory and competitive fish species.

Populations of the Little Colorado spinedace, like those of many other desert fishes, fluctuate dramatically from year-to-year. There are many reasons for these fluctuations, and historically they have probably reflected periods of drought and/or increased rainfall. However, in more recent history the impact of human populations and their increasing demand for water has adversely affected spinedace populations. Various uses of water by man have adversely altered spinedace habitat and have accentuated population lows and reduced population highs. Such activities could lead to the extirpation of the Little Colorado spinedace in areas which normally would have sustained populations of the fish through drought periods. Such population fluctuations make it difficult to delineate precisely the current range of the Little Colorado spinedace. Spinedace populations have fallen to extremely low levels several times within the past 25 years. During these population lows, extensive collection efforts may fail to take spinedace at

locations which formerly supported healthy populations. These same locations may later support spinedace populations. Little Colorado spinedace are presently known from the following locations (Miller, 1961; Miller and Hubbs, 1960; Minckley, 1973; Minckley and Carufel, 1967; Miller, 1963; Minckley and McCall, 1977):

(1) *East Clear Creek and its Tributaries.* Coconino County, Arizona. The spinedace occupies approximately 35 stream miles extending upstream from the confluence with Clear Creek to the headwaters near Potato Lake. The stream flows through the Apache-Sitgreaves and Coconino National Forests, with some interspersed privately-owned lands. At present the only tributary known to harbor Little Colorado spinedace is Leonard Canyon at Dines tank (T. 13 N., R. 12 E, Sec. 28); however, during periods of higher population levels it is likely that spinedace occupy the other tributaries, particularly near their mouths.

(2) *Chevelon Creek.* Navajo County, Arizona. The spinedace occupies the lower 8 stream miles from the confluence with the Little Colorado River, near Winslow, upstream. Lands here are privately-owned, with the exception of a small portion which is the Arizona Game and Fish Department's Chevelon Creek Wildlife Area.

(3) *Silver Creek.* Navajo County, Arizona. The spinedace occupies approximately 20 stream miles of Silver Creek extending from its confluence with the Little Colorado River upstream to its headwaters near the town of Silver Creek. The stream flows primarily on privately-owned lands with only small sections of stream flowing through State and Bureau of Land Management lands.

(4) *Little Colorado River.* Apache County, Arizona. The Little Colorado spinedace is found sporadically throughout approximately 40 miles of stream in this area, from the town of St. Johns upstream to the headwaters in the White Mountains near the town of Greer. Upstream from St. Johns, Arizona, the river flows through privately-owned lands, then through contiguous State lands, and then through additional privately-owned lands around the town of Springerville. The upper end of the river flows through the Apache-Sitgreaves National Forest with only a few privately-owned inholdings.

(5) *Nutrioso Creek.* Apache County, Arizona. The spinedace occupies approximately 12 stream miles from the confluence with the Little Colorado River upstream to near the town of Nutrioso. The stream flows through privately-owned lands around the towns

of Springerville and Nutrioso; however, approximately 5 miles of the stream flows through the Apache-Sitgreaves National Forest, and a small portion flows through State-owned lands.

The Little Colorado spinedace inhabits very small to moderate sized streams and is characteristically found in pools with flowing water, over fine gravel and silt-mud substrates. During periods of drought spinedace persist in intermittent streambed pools, and during flooding they tend to distribute themselves throughout the stream with no apparent habitat preferences. The spinedace apparently spawns primarily in early summer, but continues at a reduced level until early fall (Minckley, 1973).

The Little Colorado spinedace was included in the Service's "Review of Vertebrate Wildlife for Listing as Endangered or Threatened Species" published in the *Federal Register* on December 30, 1982 (47 FR 58454-60). It was considered a category 1 species, indicating that the Service had substantial information on hand to support a proposal to list as endangered or threatened. On April 12, 1983, the Service received a petition from the Desert Fishes Council to list the Little Colorado spinedace. This petition was found to contain substantial scientific or commercial information, and a notice of finding was published on June 14, 1983 (48 FR 27273). After a review and evaluation of the petition's merits, the service has found that the petitioned action is warranted, and a notice of the finding that the species warrants listing was published in the *Federal Register* on July 13, 1984 (49 FR 28583). This proposed rule constituted a required 12-month finding on that petition, that the action requested is warranted.

Summary of Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (to be codified at 50 CFR Part 424, 49 FR 38900, October 1, 1984) set forth the procedures for adding species to the Federal lists. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to the Little Colorado spinedace (*Lepidomeda vittata*) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* Much of the historic habitat of the Little Colorado spinedace has been adversely modified or destroyed by human activities in the

Little Colorado River basin. One of the most detrimental of these uses has been the impoundment of the rivers and streams. The spinedace is a stream dwelling fish and as such is unable to exist in lacustrine waters such as reservoirs. There are now approximately 150 impoundments in the Little Colorado basin, ranging from small stock tanks to reservoirs of up to 1,400 surface acres. Except for the smaller stock tanks located on streams, these reservoirs are uninhabitable by the spinedace. In many areas, these reservoirs have inundated and thus destroyed previously occupied spinedace stream habitat. In addition, these impoundments have often resulted in the total or partial dewatering of long downstream reaches of stream, resulting in the destruction of spinedace habitat. The presence of these reservoirs also adversely affects the continued existence of the spinedace upstream and downstream from the reservoir through predation by and competition with exotic fish species.

Other human uses and alterations of the waters and lands of the Little Colorado spinedace range have also been detrimental to spinedace habitat. These uses include riparian destruction, urban growth, mining, timber and pulpwood harvest, road construction, livestock grazing, and other watershed disturbances. The precise effect of many of these uses on fish populations, particularly spinedace, are difficult to define. However, these uses have resulted in many changes to the streams utilized by the Little Colorado spinedace such as dewatering, erosion and channel downcutting, chemical and organic pollution, alteration of flow regimes, alteration of stream temperature, and excessive siltation. In the 1880's, the Little Colorado River above Grand Falls was a perennial stream with extensive riparian areas of grasses, cottonwoods, and willows. Extensive swamps and marshy areas existed above the town of Winslow (Miller, 1961). The river now has perennial flow only in the uppermost 10 to 15 percent of its length.

Future threats to the remaining habitat of the Little Colorado spinedace come from the same human uses that have resulted in past habitat alteration and destruction. There are several proposed new water projects for the area, and additional new projects continue to be proposed as water demand increases. Wilkin's Dam, at the confluence of Clear and East Clear Creeks, is a proposed Bureau of Reclamation project, a part of the larger Mogollon Mesa project which would also include a new dam on upper Chevelon Creek. Wilkin's Dam would inundate approximately 8 miles of

stream and significantly decrease downstream flows, while contributing significantly to the problem of exotic predatory and competitive fishes in East Clear Creek (see Factors C and E). This project is presently inactive and is not expected to be reactivated in the near future. However, the nearby town of Flagstaff is presently seeking ways to increase its water supply, thus creating pressure to reactivate this or other similar projects. In 1977, the Arizona Public Service Corporation did test drilling to tap groundwater in the Chevelon Creek drainage. This water was to be used for the Cholla Lake generating facility near Holbrook, Arizona; however, the quality of the water found in the test drilling was too poor for their needs. Additionally, the Arizona Game and Fish Department has identified nine potential sites within existing spinedace range that they are considering for future recreational impoundments.

Residential, recreational, and urban growth in the vicinity of the towns of Snowflake, Taylor, Springerville, and Saint Johns, Arizona, are also potential threats to spinedace habitat. This growth has indirect effects on the spinedace through an increased water demand, and direct effects through alterations to the stream channels and riparian zones and by contributing pollution and excess sediments into the streams.

Much of the remaining Little Colorado spinedace habitat is afforded some protection by inaccessibility or by public ownership of the lands. The East Clear Creek population is located on the Coconino and Apache-Sitgreaves National Forests; portions of the Little Colorado River, Silver and Nutrioso Creeks populations are also located on the Apache-Sitgreaves National Forest, and the lower portion of Chevelon Creek flows through a rugged canyon in relatively roadless country. As the human population of the adjacent areas increases, and the demand for water and recreational access increases, those spinedace populations on public or presently inaccessible lands will be subjected to mounting pressures for water projects, road construction, and other development.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* There is no evidence that the Little Colorado spinedace is overutilized for any of these purposes.

C. *Disease or predation.* Predation by exotic piscivorous fish has been shown to be a contributing factor in the decline of many native Southwestern fishes, and has undoubtedly been a major factor in

the decline of the Little Colorado spinedace. The spinedace was historically associated with few, if any, fish predators. Of the native fish species of the Little Colorado River, only the roundtail chub (*Gila robusta*) was a potential predator on spinedace. However, in the past 100 years, several exotic predatory fish species have been introduced into Little Colorado spinedace habitats. These species include black bullhead (*Ictalurus melas*), channel catfish (*Ictalurus punctatus*), yellow bullhead (*Ictalurus nebulosus*), green sunfish (*Lepomis cyanellus*), largemouth bass (*Micropterus salmoides*), rainbow trout (*Salmo gairdneri*), and brown trout (*Salmo trutta*). The continuing adverse impact of these predators on the Little Colorado spinedace, and the possibility of further introduction and spread of predatory fish is a significant threat to the existence of the spinedace. The construction of reservoirs in or near spinedace habitat exacerbates the threat of exotic fish introductions and the spread of predatory fishes since reservoirs are desirable habitat for many predatory game fishes, many of which are purposely introduced for recreational purposes. The introduction of such fish into these reservoirs allows and encourages their spread throughout the range of the Little Colorado spinedace. Additionally, parasites introduced with such exotic fish may also adversely affect the spinedace.

D. *The inadequacy of existing regulatory mechanisms.* The State of Arizona lists this species under Group 3 of the Threatened Wildlife of Arizona. Group 3 includes, "Species or subspecies whose continued presence in Arizona could be in jeopardy in the foreseeable future" (Arizona Game and Fish Commission, 1982). Under this designation taking of the Little Colorado spinedace is regulated and is allowed only under a collecting permit or by licensed angling. However, no protection of the habitat is included in such a designation and no management plan exists for this species.

E. *Other natural or manmade factors affecting its continued existence.* The introduction of exotic fishes into the habitat of the Little Colorado spinedace poses a major threat to the spinedace from competitive interactions as well as from predation. The golden shiner (*Notemigonus crysoleucas*) is presently found in large numbers in Chevelon Creek, and has been found in the Little Colorado River basin since the late 1950's. In Chevelon Creek, golden shiners were present in such large numbers in 1965 that the Arizona Game

and Fish Department treated the stream with a pesticide (fish toxicant) in an unsuccessful attempt to eradicate them. This treatment was considered necessary because the golden shiner competes with the young of game fish, particularly trout (Minckley, 1973). Since the Little Colorado spinedace is "troutlike in its behavior and habitat requirements" (Miller, 1963), it is quite likely that the golden shiner is also a significant competitor with the Little Colorado spinedace (Minckley and Carufel, 1967). The possibility of the further introduction of other competitive species, particularly the red shiner (*Notropis lutrensis*) and the redbelly shiner (*Richardsonius balteatus*), into spinedace habitats is an additional threat to the Little Colorado spinedace. The redbelly shiner has been shown to displace the Virgin River spinedace (*Lepidomeda mollispinis mollispinis*) in the Virgin River, and the red shiner is apparently displacing the spinedace (*Meda fulgida*) in portions of the Gila River system (Minckley, 1973). The shiners are widespread in Arizona. The red shiner is commonly used for bait, thus increasing the probability of its eventual introduction into Little Colorado spinedace habitat. Construction of reservoirs in or near Little Colorado spinedace habitat also increases that probability because of the increased use of bait in the fishery which develops in such reservoirs. Other exotic fishes, particularly cyprinids, may also be a competitive threat to the Little Colorado spinedace, and it has been found that the spinedace is generally rare or absent where exotic fish other than trout are present.

Another important factor in the decline of the Little Colorado spinedace has been the use of piscicides (fish toxicants) in the streams of the Little Colorado River drainage. Most of the major game-fish streams of the drainage have been subjected to poisoning, with such chemicals as rotenone and toxaphene, in generally unsuccessful attempts to rid these streams of "trash" fish such as carp, suckers, chubs, and shiners and thereby improve the streams for game fish (Miller, 1963). The Little Colorado River was treated from Lyman Reservoir downstream for approximately 10 miles in 1951, and Chevelon Creek was treated twice in 1965 (Minckley and Carufel, 1967), and again several years later. These treatments undoubtedly reduced both the populations and range of the Little Colorado spinedace significantly.

No estimate has been made of Little Colorado spinedace population sizes; however, it is well known that their

numbers fluctuate markedly. Because of this, threats to the spinedace must be analyzed as to their impact at the lowest population levels. Habitat alterations which may not significantly affect populations at moderate or high levels may be disastrous at low population levels, and could lead to extirpation of the species.

The Service has carefully assessed the best scientific and commercial information available, regarding the past, present, and future threats faced by this species in determining to propose this rule. Based on this evaluation, the preferred action is to list the Little Colorado spinedace as threatened. Threatened status seems appropriate because of the severely reduced range of the species, and because of the many threats to the fish and its remaining habitat. If this species is not listed, it could reasonably be expected to become endangered within the foreseeable future and thus not listing would be a violation of the Act's intent. Since the species is still extant in several locations and the threats to the species are generally localized, the species is not in danger of extinction at this time and thus endangered status is not appropriate.

Critical Habitat

Critical habitat, as defined by Section 3 of the Act means: (i) the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection, and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Section 4(a)(3) of the Act requires that critical habitat be designated to the maximum extent prudent and determinable concurrently with the determination that a species is endangered or threatened. Critical habitat is being proposed for the Little Colorado spinedace to include the following:

(1) *East Clear Creek, Coconino County, Arizona*; approximately 18 miles of stream extending from the confluence with Leonard Canyon upstream to the Blue Ridge Reservoir dam, and approximately 13 miles of stream extending from the upper end of Blue Ridge Reservoir upstream to Potato Lake.

(2) *Chevelon Creek, Navajo County, Arizona*; approximately 8 miles of stream extending from the confluence with the Little Colorado River upstream to a spring source.

(3) *Nutrios Creek, Apache County, Arizona*; approximately 5 miles of stream from the Apache-Sitgreaves National Forest boundary upstream to the Nelson Reservoir dam.

These stream portions were chosen for critical habitat designation because they presently support healthy self-perpetuating populations of the Little Colorado spinedace. They provide all of the ecological, behavioral, and physiological requirements necessary for the survival of the spinedace.

However, due to the extreme fluctuations which Little Colorado spinedace populations exhibit, these areas may not necessarily support the most stable and healthy populations of spinedace at any given time in the future. At present, the Silver Creek and Little Colorado River populations are spotty and/or difficult to locate, but this situation may change with periodic population fluctuations. This designation of critical habitat was proposed based on the best available information; however, if subsequent to this proposal, some areas are found not to be critical to the species' needs, or if exclusion of some areas outweigh the benefits of specifying the areas as part of the critical habitat, they may be excluded from the final rulemaking. Notwithstanding this provision, if failure to designate any area as critical habitat would result in extinction of the species, such areas may not be excluded. If new information demonstrates additional necessary critical habitat areas for this species, they must be subject to a new Federal Register proposal.

Section 4(b)(8) requires, for any proposed or final regulation that designates critical habitat, a brief description and evaluation of those activities (public or private) which may adversely modify such habitat or may be affected by such designation. Any activity which would deplete the flow, lessen the amount of minimum flow, or significantly alter the natural flow regime of East Clear, Chevelon, or Nutrios Creeks could adversely impact the proposed critical habitat. Such activities include, but are not limited to, excessive groundwater pumping, impoundment, and water diversion. Also, any activity which would extensively alter the water chemistry of East Clear, Chevelon, or Nutrios Creeks could adversely affect the proposed critical habitat. Such activities include, but are not limited to, release of

chemical or biological pollutants at a point source or by dispersed release. The introduction, advent or otherwise, of exotic predatory and competitive fish species and their parasites could adversely affect Little Colorado spinedace populations and could reduce or eliminate them within the critical habitat.

Section 4(b)(2) of the Act requires the Service to consider economic and other impacts of designating a particular area as critical habitat. The Service will consider the critical habitat designation in light of all additional relevant information obtained at the time of final rule.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by other Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. Such actions are initiated by the Service following listing. The protection required by Federal agencies and the prohibitions against taking and harm are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR Part 402, and are presently under revision (see proposal published at 48 FR 29990; June 29, 1983). Section 7(a)(4) requires Federal agencies to confer informally with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

At present, no known Federal activities would be affected by this proposal. On East Clear Creek, the Little Colorado spinedace habitat is primarily on the Conconino and Apache-Sitgreaves National Forests. The Forest Service does not expect any significant impact on management of this area as a result of this proposal since the Little Colorado spinedace is already one of their emphasized species. Wilkin's Dam on Clear Creek is a Bureau of Reclamation project and Section 7 consultation will be required if that project is ever reactivated. On Chevelon Creek, the majority of the lands is privately owned. This land is used for livestock grazing and the activities that might be affected by this proposal could be future water development projects if they are federally funded or authorized. At the lower end of Chevelon Creek, there is a small portion of land owned by the Arizona Game and Fish Department. This is the Chevelon Creek Wildlife Area and no effects from this proposal are expected on its management since it is already being managed for wildlife values. On the privately-owned lands on Silver and Nutrios Creeks, and the Little Colorado River, no effect is expected from this proposal. It is possible that future water development projects on these lands might be affected if such projects have any Federal involvement. On portions of those streams on the Apache-Sitgreaves National Forest no effect is expected.

The Act and implementing regulations found at 50 CFR 17.21 and 17.31 set forth a series of general prohibitions and exceptions that apply to all threatened wildlife. These prohibitions, in part, would make it illegal for any person subject to the jurisdiction of the United States to take, import or export, ship in interstate commerce in the course of a commercial activity, or sell or offer for sale in interstate or foreign commerce, any listed species. It would also be illegal to possess, sell, deliver, carry, transport or ship any such wildlife that had been illegally taken. Certain exceptions would apply to agents of the Service and State conservation agencies.

The above discussion generally applies to threatened species of fish or wildlife. However, the Secretary has the discretion, under section 4(d) of the Act to issue such special regulations as are necessary and advisable for the conservation of a threatened species. The State of Arizona presently regulates direct taking of the little Colorado spinedace through the requirements of State collecting permits. Since the primary threat to this species stems

from habitat disturbance and modification, and not from direct taking of the species or from commercialization, the Service concludes that the State's collecting permit system is more than adequate to protect the species from excessive taking, so long as such takes are limited to: educational purposes, scientific purposes, the enhancement of the propagation or survival of the species, zoological exhibition, and other conservation purposes consistent with the Endangered Species Act. A separate Federal permit system is not required to address the current threats to the species. Therefore, a special rule for the Little Colorado spinedace is proposed which will allow taking to occur for the above stated purposes without the need for a Federal permit, if a State collecting permit is obtained and all other State wildlife conservation laws and regulations are satisfied. In relying upon the State's permitting system, however, and not establishing separate Federal permitting procedures, the Service is interpreting the act as precluding any further application of piscicides which could directly affect the Little Colorado spinedace, unless it is in accordance with an approved conservation plan for the species. The special rule also acknowledges the fact that incidental take of the species by State-licensed recreational fishermen is not a significant threat to this species. Therefore, such incidental take would not be a violation of the Act if the fisherman immediately returned the taken fish to its habitat. It should be recognized that any activities involving the taking of this species not otherwise enumerated in the special rule are prohibited. Without this special rule, all of the prohibitions under 50 CFR Part 17.31 would apply. The Service believes that this special rule will allow for more efficient management of the species, thereby facilitating its conservation. For these reasons, the Service has concluded that this regulatory proposal is necessary and advisable for the conservation of the Little Colorado spinedace.

Public Comments Solicited

The Service intends that any final rule adopted will be accurate and as effective as possible in the conservation of any endangered or threatened species. Therefore, any comments or

suggestions from the public, other concerned governmental agencies, the scientific community, industry, private interests, or any other interested party concerning any aspect of these proposed rules are hereby solicited. Comments particularly are sought concerning:

- (1) Biological, commercial trade, or other relevant data concerning any threat (or the lack thereof) to *Lepidomeda vittata*;
- (2) The location of any additional populations of *Lepidomeda vittata* and the reasons why any habitat of this species should or should not be determined to be critical habitat as provided by Section 4 of the Act;
- (3) Additional information concerning the range and distribution of the species;
- (4) Current or planned activities in the subject areas and their possible impacts on *Lepidomeda vittata*; and
- (5) Any foreseeable economic and other impacts resulting from the proposed designation of critical habitat.

Final promulgation of the regulations on *Lepidomeda vittata* will take into consideration the comments and any additional information received by the Service, and such communications may lead to a final regulation that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be filed within 45 days of the date of the proposal. Such requests must be made in writing and addressed to the Regional Director, U.S. Fish and Wildlife Service, P.O. Box 1306, Albuquerque, New Mexico 87103.

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined by the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the *Federal Register* on October 25, 1983 (48 FR 49244).

Literature Cited

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Authors

The authors of this proposed rule are Sandra Limerick and Sally Stefferud, Endangered Species Staff, U.S. Fish and Wildlife Service, Albuquerque, New Mexico (505/766-3972 or FTS 546-5606). Status information was provided by C.O. Minckley, Flagstaff, Arizona.

List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

Proposed Regulations Promulgation

PART 17—[AMENDED]

Accordingly, it is hereby proposed to amend Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, as set forth below:

1. The authority citation for Part 17 reads as follows:

Authority: Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 96-159, 93 Stat. 1225; Pub. L. 97-304, 96 Stat. 1411 [16 U.S.C. 1531 *et seq.*].

2. It is proposed to amend § 17.11(h) by adding the following, in alphabetical order, under "Fishes" to the List of Endangered and Threatened Wildlife:

§ 17.11 Endangered and threatened wildlife.

• • • • •
(h) • • •

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
FISHES							
Spinedace, Little Colorado.....	<i>Lepidomeda vittata</i>	U.S.A. (AZ).....	Entire	T		17.95(e).....	17.44()

3. It is further proposed to amend Title 50 CFR section 17.44 by adding the following (the position of this special rule will be determined at the time the final rule is published in the Federal Register):

§ 17.44 Special rules—fishes.

* * * * *

() Little Colorado spinedace (*Lepidomeda vittata*).

(1) No person shall take this species, except in accordance with applicable State fish and wildlife conservation laws and regulations in the following instances: for educational purposes,

scientific purposes, the enhancement of propagation or survival of the species, zoological exhibition, and other conservation purposes consistent with the Act.

(2) Any violation of applicable State fish and wildlife conservation laws or regulations with respect to the taking of this species will also be a violation of the Endangered Species Act.

(3) No person shall possess, sell, deliver, carry, transport, ship, import, or export, by any means whatsoever, any such species taken in violation of these regulations or in violation of applicable

State fish and wildlife conservation laws or regulations.

(4) It is unlawful for any person to attempt to commit, solicit another to commit, or cause to be committed, any offense defined in paragraphs (1) through (3) above.

* * * * *

4. It is further proposed to amend § 17.95(e) by adding critical habitat of the Little Colorado spinedace, as follows: The position of this entry under § 17.95(e) follows the same sequence as the species occurs in § 17.11.

§ 17.95 Critical habitat—fish and wildlife.

(e) * * *

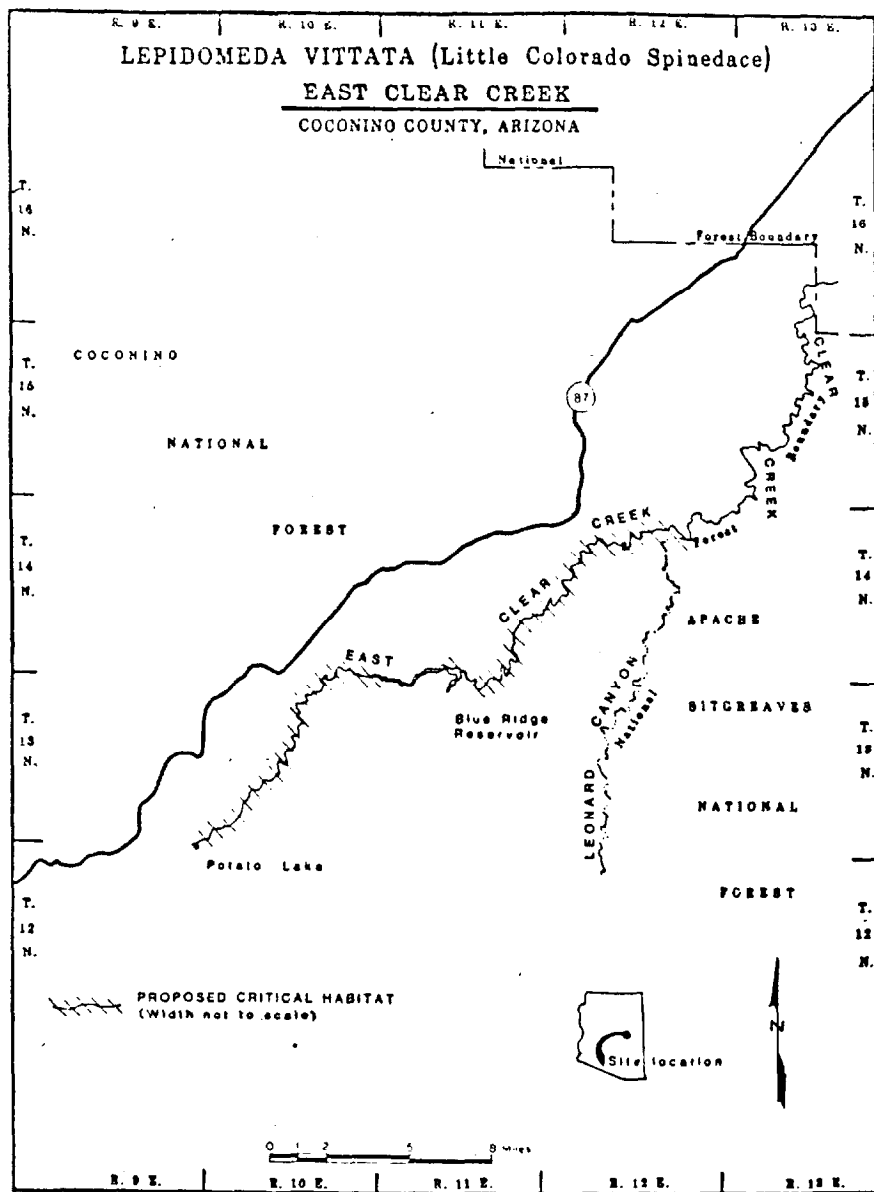
Little Colorado Spinedace

(Lepidomeda vittata)

Arizona:

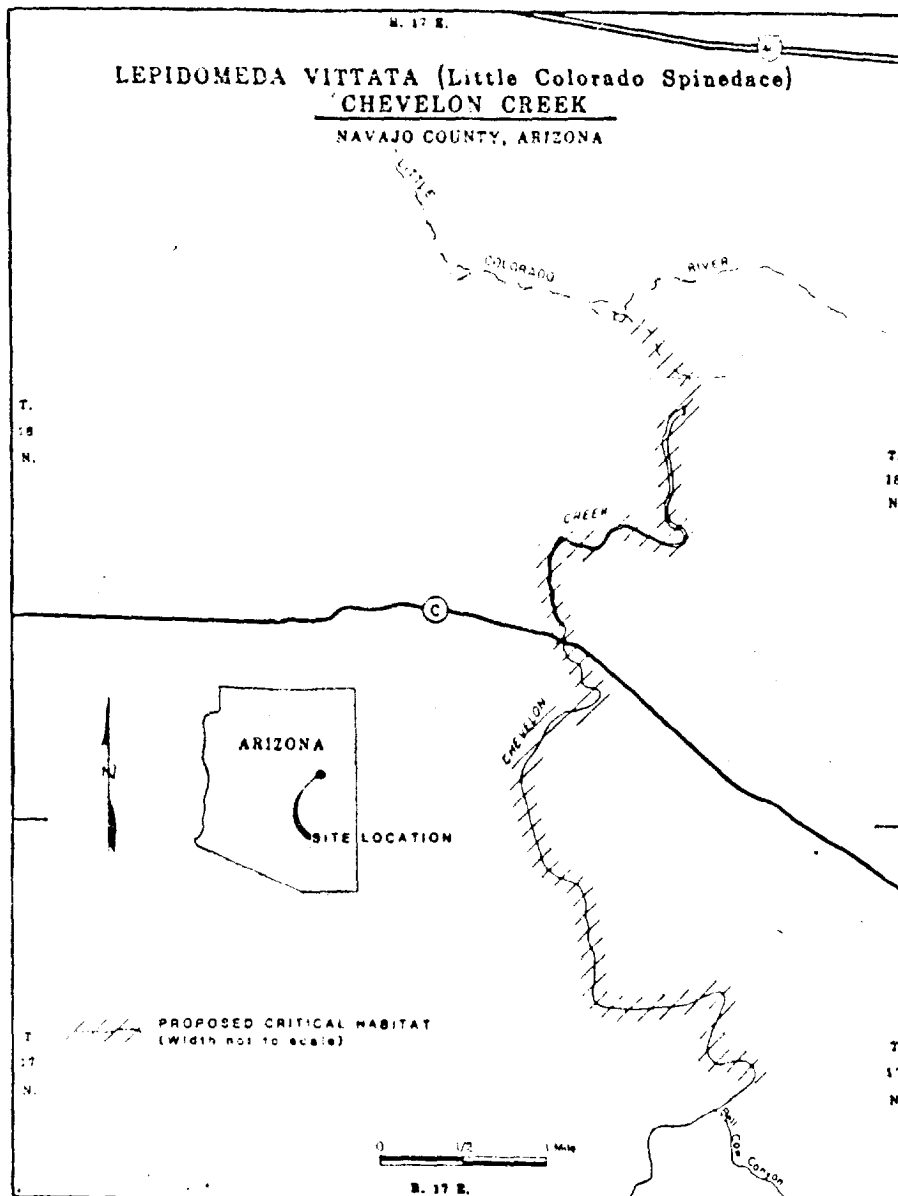
1. Coconino County. East Clear Creek:

approximately 18 miles of stream extending from the confluence with Leonard Canyon (NE ¼ Sec. 11, T. 14 N., R. 12 E.) upstream to the Blue Ridge Reservoir dam (SE ¼ Sec. 33, T. 14 N., R. 11 E.), and approximately 13 miles of stream extending from the upper end of Blue Reservoir (east boundary SE ¼ Sec. 36, T. 14 N., R. 10 E.) upstream to Potato Lake (NE ¼ Sec. 1, T. 12 N. R. 9 E.).



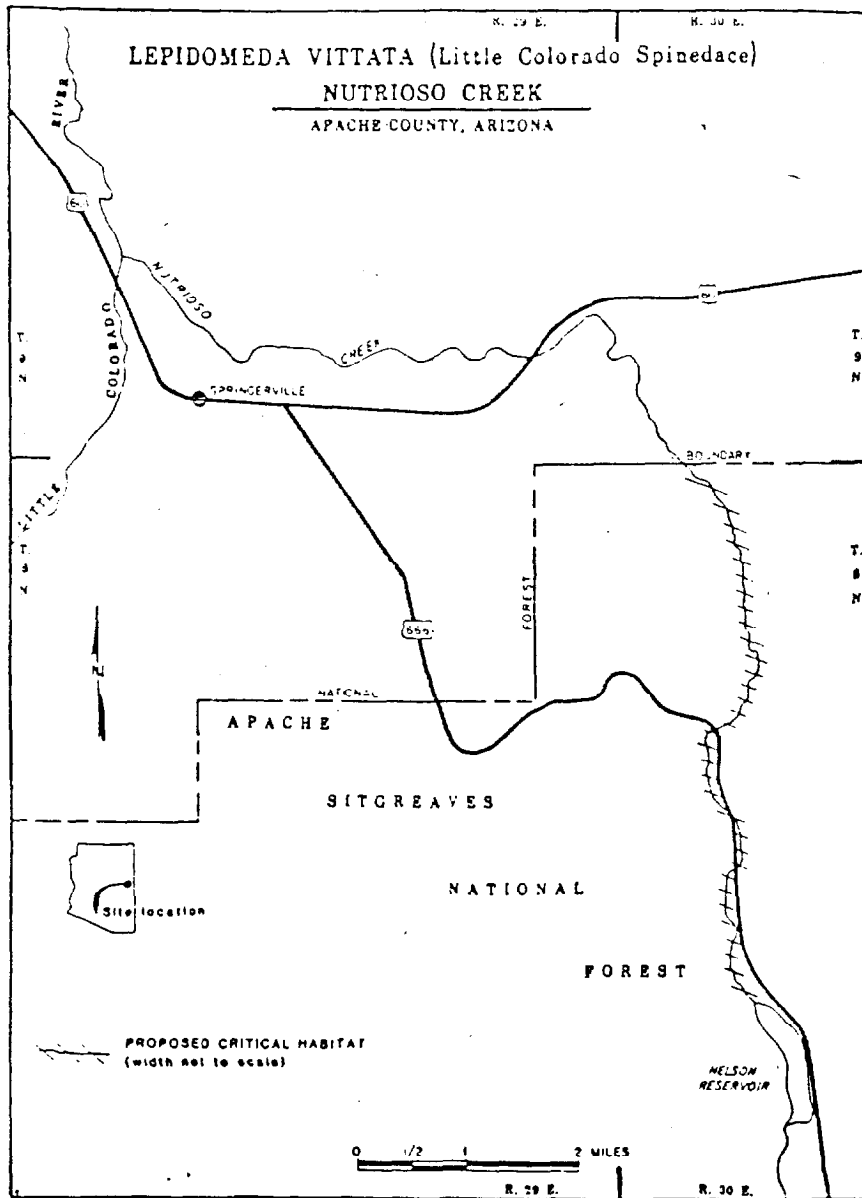
2. Navajo County, Chevelon Creek:
approximately 8 miles of stream extending
from the confluence with the Little Colorado

River (NW ¼ Sec. 23, T. 18 N., R. 17 E.)
upstream to a spring source (NE ¼ of the SW
¼ Sec. 11, T. 17 N., R. 17 E.).



3. Apache County, Nutrioso Creek; approximately 5 miles of stream extending from the Apache-Sitgreaves National Forest

boundary (north boundary Sec. 5, T. 8 N., R. 30 E.) upstream to the Nelson Reservoir dam (NE ¼ Sec. 29, T. 8 N., R. 30 E.).



Constituent elements, for all areas proposed as critical habitat, include clean, permanent flowing water, with pools and a fine gravel or silt-mud substrate.

Dated: April 29, 1985.

Susan Recce,
Acting Assistant Secretary for Fish and
Wildlife and Parks.

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